

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A vehicle-mounted display apparatus comprising:

a mounted displaying means for displaying visual information, the mounted displaying means being mounted in a fixed position within an instrument panel of an automotive vehicle;

an operating means for outputting a predetermined signal to control an operation of a device; and

a supporting means for supporting said operating means, said supporting means being provided near a peripheral portion of said displaying means, said operating means being substantially flush with said instrument panel in a first position so as to partially cover said displaying means said uncovered portion of said display means being operational and said operating means being rotatable on said supporting means about a horizontal axis, and capable of projecting forward to multiple desired positions within the automotive vehicle for use at multiple projected positions.

2. (Previously Presented) The display apparatus as claimed in claim 1, wherein said operating means is set, at a time of non-operation, to said first position in which an operating surface faces a display surface of said displaying means, and set, at a time of operation, to a second position in which, rotating from said first position, said operating surface is permitted accessible for use.

3. (Original) The display apparatus as claimed in claim 2, wherein said supporting means comprises an arm portion, said arm portion being housed when said operating means is set to said first position, and being

projected forward when said operating means is set to said second position so as to separate said displaying means from said operating means.

4. (Original) The display apparatus as claimed in claim 2, wherein, when said operating means is set to said first position, said displaying means makes a display only on a display surface which is free from overlapping with said operating means.

5. (Previously Presented) A display apparatus comprising:
a displaying means for displaying visual information;
an operating means for outputting a predetermined signal to control an operation of a device;
a supporting means for supporting said operating means, said supporting means being provided near a peripheral portion of said displaying means, said operating means being rotatable on said supporting means,
wherein said operating means is operable to be set in one of the following positions:
a first position in which an operating surface faces a display surface of said displaying means, and
a second position in which, rotating from said first position, use of said operating surface to initiate the operation is permitted,
wherein, when said operating means is set to said first position, said displaying means displays the visual information only on a display surface which is free from overlapping with said operating means, and
wherein said displaying means changes a displaying scale depending on a size of the display surface available for displaying, the size being determined based on the position of said operating means.

6. (Previously Presented) The display apparatus as claimed in claim 2, wherein said displaying means displays the visual information in a plurality of screens, and wherein, in case it the display means is to make a divided display the visual information when said operating means is set to said first position, the part of the display surface free from overlapping with said operating means is operable to display the visual information, and wherein, in case it the display means is to make a divided display the visual information when said operating means is set to said second position, the divided display is made on all of the display surface is operable to display the visual information.

7. (Original) The display apparatus as claimed in claim 2, wherein said second position is a position in which the operating surface of said operating means forms an obtuse angle relative to the display surface of said displaying means.

8. (Original) The display apparatus as claimed in claim 1, further comprising an angle adjusting means for adjusting an angle to be formed between the operating surface of said operating means and the display surface of said displaying means.

9. (Previously Presented) The display apparatus as claimed in claim 1, said display apparatus being installed in an automobile.

10. (Previously Presented) The display apparatus as claimed in claim 1, wherein said operating means permits a user to operate one or more devices, the predetermined signal being output to the device being operated by the user.

11. (Previously Presented) The display apparatus as claimed in claim 10, wherein the displaying means is used to display visual information relating to the user's operation of the device via the operating means.

12. (Previously Presented) The display apparatus as claimed in claim 11, wherein the one or more devices include at least one of an audio device, an image reproducing device, and a navigation device.

13. (Previously Presented) A vehicle-mounted display comprising:
a mounted displaying means for displaying visual information, the mounted displaying means being mounted in a fixed position in an automotive vehicle;

an operating means for outputting a predetermined signal to control an operation of a device;

a supporting means for supporting said operating means, said supporting means being provided near a peripheral portion of said displaying means, said operating means being rotatable on said supporting means, and capable of projecting forward to a desired position within the automotive vehicle,

wherein said operating means is set, at a time of non-operation, to a first position in which an operating surface faces a display surface of said displaying means, and set, at a time of operation, to a second position in which, rotating from said first position, said operating surface is permitted,

wherein said supporting means comprises an arm portion, said arm portion being housed when said operating means is set to said first position, and being projected forward when said operating means is set to said second position so as to separate said displaying means from said operating means, and

wherein the projected arm portion of the supporting means acts as the supporting point for the operating means when the operating means is set to the second position, such that the operating means is connected only to the display apparatus only through the supporting point.

14. (Previously Presented) The display apparatus as claimed in claim 5, wherein

the size of the display surface available for displaying corresponds to the size of the display surface not being overlapped with said operating means, and

the display scale changes when the operating means switches between the first position and the second position, such that the display scale is reduced when the operating means is switched to the first position and the display scale is enlarged when the operating means is switched to the second position.

15. (Currently Amended) A display method comprising:

outputting a predetermined signal based on a user's operation of a device via an operating unit, the operating unit being substantially flush with an instrument panel of an automotive vehicle in a first position;

displaying visual information at a display unit, which is mounted in a fixed position within said instrument panel of said automotive vehicle, in response to the user's operation of the device wherein said operating unit when in said first position partially covers said display unit said uncovered portion of said display being operational and an image on said display unit is scaled to a non-covered portion of the display unit;

rotatably supporting the operating unit using a support structure near a peripheral portion of the display unit, such that the operating unit is rotatable about a horizontal axis; and

projecting the operating unit forward to multiple desired positions within the automotive vehicle for use at multiple projected positions.

16. (Previously Presented) The method as claimed in claim 15, further comprising:

setting the operating unit at said first position at a time when the device is not operated by the user, wherein an operating surface of the operating unit faces the display unit when the operating unit is at the first position; and

moving the operating unit from the first position to a second position at a time the user is allowed to operate the device, wherein the operating surface is rotated so as to be accessible for use by the user to operate the device when the operating unit is at the second position.

17. (Previously Presented) The method as claimed in claim 16, further comprising:

housing an arm portion in the supporting structure when the operating unit is set at the first position, the arm portion being connected to the operating unit; and

projecting the operating unit forward with the arm portion so as to separate the operating unit from the display unit, thereby moving the operating means from the first position to the second position.

18. (Previously Presented) The method as claimed in claim 16, wherein the displaying step comprises:

displaying the visual information only on the display surface of the display unit not being overlapped by the operating unit when the operating unit is set at the first position.

19. (Previously Presented) The method as claimed in claim 17, further comprising:

changing a display scale depending on a size of the display surface available for display.

20. (Previously Presented) A display method comprising:

outputting a predetermined signal based on a user's operation of a device via an operating unit;

displaying visual information at a display unit, which is mounted in a fixed position within an automotive vehicle, in response to the user's operation of the device;

rotatably supporting the operating unit using a support structure near a peripheral portion of the display unit;

projecting the operating unit forward to a desired position within the automotive vehicle;

setting the operating unit at a first position at a time when the device is not operated by the user, wherein an operating surface of the operating unit faces the display unit when the operating unit is at the first position; and

moving the operating unit from the first position to a second position at a time the user is allowed to operate the device, wherein the operating surface is rotated so as to be accessible for use by the user to operate the device when the operating unit is at the second position,

wherein the displaying step comprises:

displaying the visual information only on the display surface of the display unit not being overlapped by the operating unit when the operating unit is set at the first position, and

wherein

when the operating unit moves from the second position to the first position, the changing step reduces the display scale so that the visual information fits within the portion of the display surface not overlapped by the operating unit; and

when the operating unit moves from the first position to the second position, the changing step enlarges the display scale to use the entire display surface for displaying the visual information.

21. (Currently Amended) A vehicle-mounted display apparatus comprising:

a display screen mounted in a fixed position within an instrument panel of an automotive vehicle;

an operating unit adapted to output signals to control an operation of a device, said operating unit being substantially flush with said instrument panel in a first position so as to cover partially cover said display screen, said uncovered portion of said display being operational;

a supporting unit that rotatably supports said operating unit about a horizontal axis, such that said operating unit is capable of projecting forward to multiple desired positions within the automotive vehicle for use at multiple projected positions, said supporting unit being located near a peripheral portion of said display screen.

22. (Previously Presented) The display apparatus as claimed in claim 21, wherein said operating unit is set, at a time of non-operation, to said first position in which an operating surface faces a display surface of said display screen, and set, at a time of operation, to a second position in which, rotating from said first position, said operating surface is permitted accessible for use.

23. (Previously Presented) The display apparatus as claimed in claim 22, wherein said supporting unit comprises an arm portion, said arm portion being housed when said operating unit is set to said first position, and being projected forward when said operating unit is set to said second position so as to separate said display screen from said operating unit.

24. (Previously Presented) The display apparatus as claimed in claim 22, wherein, when said operating unit is set to said first position, said display screen makes a display only on a display surface which is free from overlapping with said operating unit.

25. (Previously Presented) A display apparatus comprising:
a display screen;
an operating unit adapted to output signals to control an operation of a device;

a supporting unit rotatably supporting said operating unit, said supporting unit being disposed near a peripheral portion of said display screen,
wherein said operating unit is operable to be set in one of the following positions:

a first position in which an operating surface faces a display surface of said display screen, and

a second position in which, rotating from said first position, use of said operating surface to initiate the operation is permitted,

wherein:

when said operating unit is set to said first position, said screen displays the visual information only on a display surface which is free from overlapping with said operating unit, and

a display scale on said display screen is changed depending on a size of the display surface available for displaying, the size being determined based on the position of said operating unit.

26. (Previously Presented) The display apparatus as claimed in claim 22, wherein said display screen displays the visual information in a plurality of screens, and wherein, in case it is to make a divided display when said operating unit is set to said first position, the divided display is made only on the display surface free from overlapping with said operating unit, and wherein, in case it is to make a divided display when said operating unit is set to said second position, the divided display is made on all of the display surface.

27. (Previously Presented) The display apparatus as claimed in claim 22, wherein said second position is a position in which the operating surface of said operating unit forms an obtuse angle relative to the display surface of said display screen.

28. (Previously Presented) The display apparatus as claimed in claim 21, further comprising an angle adjusting unit for adjusting an angle to be formed between the operating surface of said operating unit and the display surface of said display screen.

29. (Previously Presented) The display apparatus as claimed in claim 21, said display apparatus being installed in an automobile.

30. (Previously Presented) The display apparatus as claimed in claim 21, wherein said operating unit permits a user to operate one or more devices, the predetermined signal being output to the device being operated by the user.

31. (Previously Presented) The display apparatus as claimed in claim 30, wherein the display screen is used to display visual information relating to the user's operation of the device via the operating unit.

32. (Previously Presented) The display apparatus as claimed in claim 31, wherein the one or more devices include at least one of an audio device, an image reproducing device, and a navigation device.

33. (Previously Presented) A vehicle-mounted display apparatus comprising:

a display screen mounted in a fixed position of an automotive vehicle;

an operating unit adapted to output signals to control an operation of a device;

a supporting unit that rotatably supports said operating unit, such that said operating unit is capable of projecting forward to a desired position within the automotive vehicle, said supporting unit being located near a peripheral portion of said display screen,

wherein said operating unit is set, at a time of non-operation, to a first position in which an operating surface faces a display surface of said display screen, and set, at a time of operation, to a second position in which, rotating from said first position, said operating surface is permitted,

wherein said supporting unit comprises an arm portion, said arm portion being housed when said operating unit is set to said first position, and being projected forward when said operating unit is set to said second position so as to separate said display screen from said operating unit, and

wherein the projected arm portion of the supporting unit acts as the supporting point for the operating unit when the operating unit is set to the

second position, such that the operating unit is connected only to the display apparatus only through the supporting point.

34. (Previously Presented) The display apparatus as claimed in claim 25, wherein

the size of the display surface available for displaying corresponds to the size of the display surface not being overlapped with said operating unit, and

the display scale changes when the operating unit switches between the first position and the second position, such that the display scale is reduced when the operating unit is switched to the first position and the display scale is enlarged when the operating unit is switched to the second position.